

Title (en)

METHOD OF NITRIDING A COMPONENT OF A FUEL INJECTION SYSTEM

Title (de)

VERFAHREN ZUM NITRIEREN EINES BAUTEILS EINES KRAFTSTOFFEINSPRITZSYSTEMS

Title (fr)

PROCÉDÉ DE NITRURATION D'UN COMPOSANT D'UN SYSTÈME D'INJECTION DE CARBURANT

Publication

**EP 3167094 B1 20190710 (DE)**

Application

**EP 15726870 A 20150505**

Priority

- DE 102014213510 A 20140711
- EP 2015059781 W 20150505

Abstract (en)

[origin: WO2016005073A1] The invention relates to a method for nitriding a component of a fuel injection system, said component being loaded under high pressure and being composed of an alloyed steel. The method comprises the following steps: - activating the component in inorganic acid, - pre-oxidizing the component in oxygen-containing atmosphere between 380 °C and 420 °C, - nitriding the component between 520 °C and 570 °C at a high first nitriding potential KN,1 in the  $\epsilon$  nitride range, - nitriding the component between 520 °C and 570 °C at a lower second nitriding potential KN,2 in the  $\gamma'$  nitride range.

IPC 8 full level

**C23C 8/02** (2006.01); **C23C 8/26** (2006.01); **C23C 8/34** (2006.01); **F02M 61/10** (2006.01); **F02M 61/16** (2006.01)

CPC (source: CN EP KR US)

**C23C 8/02** (2013.01 - CN EP KR US); **C23C 8/26** (2013.01 - CN EP KR US); **C23C 8/34** (2013.01 - CN EP KR US); **F02M 61/10** (2013.01 - CN EP KR US); **F02M 61/166** (2013.01 - CN EP KR US); **F02M 61/168** (2013.01 - US); **F02M 2200/9038** (2013.01 - CN EP KR US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**WO 2016005073 A1 20160114**; CN 106661712 A 20170510; CN 106661712 B 20190528; DE 102014213510 A1 20160218; EP 3167094 A1 20170517; EP 3167094 B1 20190710; JP 2017528635 A 20170928; JP 6456000 B2 20190123; KR 102337455 B1 20211213; KR 20170031182 A 20170320; US 10125734 B2 20181113; US 2017138326 A1 20170518

DOCDB simple family (application)

**EP 2015059781 W 20150505**; CN 201580037944 A 20150505; DE 102014213510 A 20140711; EP 15726870 A 20150505; JP 2017501185 A 20150505; KR 20177003639 A 20150505; US 201515325426 A 20150505